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WHAT IS CLAIMED IS:

1.   A compound comprising:

(a) one or more CD1d complexes; and

(b) an antibody or fragment thereof specific for a cell surface marker;

wherein said CD1d complexes comprise a CD1d and a β2-microglobulin molecule, and

wherein said CD1d molecules are linked to said antibody or fragment thereof.

2.   The compound of claim 1, further comprising an antigen bound to said one or more CD1d molecules.

3.   The compound of claim 2, wherein said antigen is a molecule selected from the group consisting of a lipid, a glycolipid, and a hydrophobic peptide.

4.   The compound of claim 3, wherein said antigen is α-GalCer.

5.   The compound of claim 3, wherein said antigen is α-GalCer modified to have a shortened long-chain sphingosine base (C5 vs. C14) and acyl chain (C24 vs. C26)

6.   The compound of claim 5, wherein said modified α-GalCer is the OCH analog with a long-chain sphingosine base shortened from C14 to C5 and acyl chain from C26 to C24.

7.   The compound of any of claims 1-6, wherein said antibody or fragment thereof is a F(ab) fragment.

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8.   The compound of any of claims 1-6, wherein said antibody or fragment thereof is a F(ab')2 fragment.

9.   The compound of any of claims 1-6, wherein said antibody or fragment thereof is a full-length antibody.

10.   The compound of any of claims 1-9, wherein said cell surface marker is a cell surface marker of tumor cells.

11.   The compound of claim 10, wherein said cell surface marker is selected from the group consisting of: CEA, Her2/neu, EGFR type I or type II, CD19, CD20, CD22, Muc-1, PSMA, or STEAP.

12.   The compound of claim 10, wherein said cell surface marker is selected from the group consisting of: Lewis Y, erbB-3 and -4, Ep-CAM, E-cadherin neoepitope, EGFR deletion neoepitope, CA19-9, Muc-1, LeY, TF-, Tn- and sTn-antigen, TAG-72, Cora antigen, CD7, CD25, Ig-a and Ig-B, A33 and G250, CD30, MCSP and gp100, CD44-v6, MT-MMPS, (MIS) receptor type II, carboanhydrase 9, F19-antigen, Ly6, desmoglein 4, PSCA, Wue-1, GD2 and GD3 as well as TM4SF-antigens (CD63, L6, CO-29, SAS), the alpha and gamma subunit of the fetal type acetylcholinreceptor (AChR), CM-1, 28K2, E48, U36, NY-ESO-1, KU-BL 1-5, NY CO 1-48, HOM MEL 40, OV569, ChCE7, CA19-9, CA125, GM2, GD2, 9-o-acetyl-GD3, or GD3.

13.   The compound of any of claims 1-9, wherein said cell surface marker is a cell surface marker of dendritic cells.

14.   The compound of claim 13, wherein said cell surface marker is selected from the group consisting of: CD83, DEC205, CMRF-44, CMRF-56, DC-SIGN, Toll-like Receptors (TLR) including TLR1, TLR2, TLR3, TLR4, TLR5, TLR7, TLR9, mannose receptor, mannan-binding lectin (MBL),

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ALCAM, DC-LAMP, phosphatidylserine receptor, BDCA-1, BDCA-2, BDCA-3 or BDCA-4.

15.   The compound of claim 13, wherein said cell surface marker is selected from the group consisting of: BDCA-1, BDCA-3, DEC205, TLR2, TLR4, and mannose receptor expressed on myeloid dendritic cells.

16.   The compound of claim 13, wherein said cell surface marker is selected from the group consisting of: BDCA-2, BDCA-4, TLR7, and TLR9 expressed on plasmacytoid dendritic cells.

17.   The compound of any of claims 1-9, wherein said cell surface marker is a cell surface marker of a target of autoimmune or inflammatory disease.

18.   The compound of claim 17, wherein said autoimmune disease is multiple sclerosis.

19.   The compound of claim 18, wherein said cell surface marker is a marker of myelinated cells.

20.   The compound of claim 19, wherein said myelinated cell surface marker is MOG, MBP or PLP.

21.   The compound of claim 17, wherein said autoimmune disease is type I diabetes.

22.   The compound of claim 17, wherein said cell surface marker is a marker of pancreatic islet beta cells.

23.   The compound of claim 22, wherein said cell surface marker is GT3 ganglioside, IGRP, or SUR1.

24.   The compound of claim 17, wherein said cell surface marker is a marker of pancreatic peri-islet Schwann cells.

25.   The compound of claim 24, wherein said cell surface marker is glial fibrillary acidic protein or S100beta.

26.   The compound of claim 17, wherein said autoimmune or inflammatory disease is ankylosing spondylitis, acute anterior uveitis, atrophic gastritis, Goodpasture's syndrome, Graves' disease, Hashimoto's thyroiditis, Myasthenia gravis, psoriasis, psoriatic arthritis, rheumatoid arthritis, Systemic Lupus Erythematosus, systemic sclerosis, Pemphigus vulgaris, pernicious anemia, primary biliary cirrhosis, ulcerative colitis, or autoimmune Hepatitis.

27.   The compound of claim 17, wherein said cell surface marker of an autoimmune or inflammatory disease is type II collagen, thyroglobulin, TSH receptor, or K+/H+ ATPase.

28.   The compound of any of claims 1-9, wherein said cell surface marker is a cell surface marker of an infected cell or tissue.

29.   The compound of claim 28, wherein said infected cell or tissue is infected by a virus, a bacteria, a fungus, a protozoan, or a helminth.

30.   The compound of claim 28, wherein said infected cell is a cell infected by human retroviruses (HTLV I or HTLV II, HIV1 or HIV2) or human herpes viruses (HSV1 or HSV2, CMV, or EBV).

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31.   The compound of claim 28, wherein said cell surface marker of an infected cell is the envelope protein of a human retrovirus.

32.   The compound of claim 28, wherein said infected cell is a cell infected by influenza virus (influenza A, B or C).

33.   The compound of claim 28, wherein said cell surface marker of an infected cell is a viral haemagglutinin.

34.   The compound of claim 28, wherein said infected cell is a cell infected by rubella virus and said cell surface marker of an infected cell is glycoprotein E1 or E2 of rubella virus.

35.   The compound of claim 28, wherein said infected cell is a cell infected by rabies virus and said cell surface marker of an infected cell is RGP of rabies virus.

36.   The compound of any one of claims 1-35, wherein said CD1d molecule is attached to the heavy chain of said antibody.

37.   The compound of any one of claims 1-35, wherein said CD1d molecule is attached to the light chain of said antibody.

38.   The compound of any one of claims 1-35, wherein said β2 microglobulin molecule is attached to the heavy chain of said antibody.

39.   The compound of any one of claims 1-35, wherein said β2 microglobulin molecule is attached to the light chain of said antibody.

40.   The compound of any one of claims 1-39, wherein said CD1d complexes are fused to said antibody.

41.   The compound of any one of claims 1-39, wherein said CD1d complexes are attached to said antibody through a linker sequence.

42.   The compound of any one of claims 1-39, wherein said CD1d complexes are attached to said antibody through a multivalent compound.

43.   The compound of claim 42, wherein said multivalent compound is selected from the group consisting of strepatvidin, chicken avidin and a modified GCN4-zipper motif.

44.   The compound of any of claims 1-43, further comprising a costimulatory molecule.

45.   The compound of claim 44, wherein said costimulatory molecule is B7.

46.   A method of inducing an anti-tumor response in a mammal, comprising administering the compound of any of claims 1-45 to said mammal.

47.   A method of preventing or treating autoimmunity or inflammatory disease in a mammal, comprising administering the compound of any of claims 1-45 to said mammal.

48.   A method of preventing or treating an infectious disease in a mammal, comprising administering the compound of any of claims 1-45 to said mammal.